BREVIORA

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A DESCRIPTION OF *DINOPIS LONGIPES* F. P.-CAMBRIDGE, 1902 (Araneae, Dinopidae).

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F. P.-Cambridge described this highly interesting species entirely by means of figures and a statement of the total lengths of the two sexes. It may be that one reason for this extreme brevity was due to the fact that fully mature individuals have extraordinarily long and fragile legs and the body is usually badly distorted in the preservative. This results in considerable difficulty in getting specimens sufficiently intact to make description significant. It has usually been assumed that this is a rare species but this is probably because collecting activities have not been sufficiently intensive. At any rate, I now have in my collection several mature specimens of both sexes and numerous immature individuals.

Because of the extreme brevity of the original description it has been thought advisable to prepare a detailed description of both sexes in order to make clear the fundamental features of the species. After a careful search through the collection, individuals of both sexes have been selected for detailed description in accord with my usual formula. The selected male is smaller than some other individuals of the same sex but its parts are quite well preserved and its legs are much less fragile than in most of the other available specimens. It appears to have been captured soon after the last moult and before its full size had been reached. The female selected for description had probably reached her full mature size.

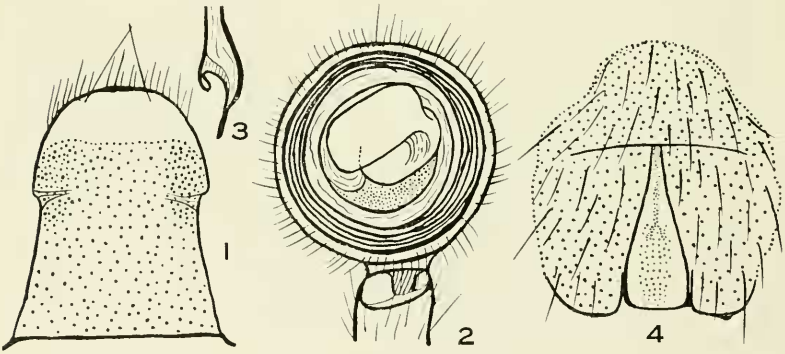
Genus Dinopis Macleay, 1839

Dinopis longipes F. P.-Cambridge, 1902

Male. Total length 16.282 mm. Carapace 4.42 mm. long; about 2.73 mm. wide; extremely flat; with a shallow median depression continued posteriorly by a long, very narrow groove; with several very short spines.

Eyes. Eight in three rows with arrangement typical of the genus; posterior centrals enormously enlarged and moved forward to dominate the optical area. Viewed from above, only posterior eyes seen in two rows. Viewed from in front, anterior row definitely procurved. Ratio of eyes AME : ALE : PME : PLE = 13 : 15 : 32 : 16. AME separated from one another by 18/13 of their diameter, from ALE by 42/13 of their diameter. PME separated from one another by about 2/3 of their diameter, from PLE by nearly 3/2 of their diameter. (All measurements are made from the inner margin of the iris and not the margin where the cornea becomes continuous with the cuticle, which is often difficult to determine.) The iris of the PME is purplish and the border of the cornea is bright red. The clypeus is lacking because of the marginal position of the first row of eyes. The AME are located on a common tubercle; each ALE is also mounted on a fairly prominent tubercle.

Chelicerae. Rather small for the size of the animal; basal segment about .77 mm. long; distal half of medial surface with many long, curved, stiff, brownish bristles. Fang evenly curved, without special features. Fang groove fairly well defined; with 5 definite small teeth plus a terminal nodule along the promargin; with 10-12 minute teeth along the retromargin, some of which are no more than nodules; some irregularities have been noted on left and right sides and in different specimens.



External Anatomy of *Dinopis longipes*

Fig. 1. Lip.

Fig. 2. Palpal tarsus of male showing coiled embolus and central apophysis.

Fig. 3. Distal end of embolus; removed from a second male.

Fig. 4. Epigynum from below.

Maxillae. Nearly parallel in general; massive in proximal halves; narrowed and somewhat diverging in distal halves; with well developed scopulae.

Lip. General features shown in Figure 1.

Legs. 1243. Width of first patella at "knee" .550 mm., tibial index of first leg 3. Width of fourth patella at "knee" .440 mm., tibial index of fourth leg 4.

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
		(All measurements in mm.)				
1.	13.780	1.950	14.495	20.150	5.460	55.835
2.	11.700	1.755	11.310	12.675	3.510	40.950
3.	9.750	1.280	7.410	7.280	1.625	27.345
4.	10.855	1.690	10.075	10.725	1.755	35.100
Palp	2.015	.845	.520	—	1.170	4.550

Spines: Numerous femoral spines are present but apparently all are very small and, perhaps, irregularly placed; no patellar spines have been observed; tibial and metatarsal spines are numerous and of moderate size. Three tarsal claws are present with each upper claw provided with a single row of about six teeth; the third claw is simple and without teeth; there are also numerous spurious claws present. Numerous trichobothria have been observed on tibiae and metatarsi; they are not confined to "ventral surface at base of tibia" as stated by Dr. Petrunkevitch (1939). The calamistrum is moderately well developed on the proximal half of the fourth metatarsus of immature specimens; on the specimen here described in detail it is, apparently, much reduced.

Palp. Both patella and tibia are short, simple and lacking apophyses or other special modifications; the cymbium is a deep cup-shaped structure containing the bulb which has an extraordinarily long, coiled embolus; enclosed in the center of the circular coils of the embolus is a somewhat distinctive structure noted by F. P.-Cambridge and again noted in this study. Figures 2 and 3 show the chief features of the palp as observed by this author. The length of the free part of the embolus seems to vary in different individuals. In one example there were apparently ten circular coils making a total length of the embolus approximating two inches. In the specimen described here in detail the free part of the embolus is much shorter; when stretched out it resembles a clock spring. The median apophysis surrounded by the coiled embolus also exhibits different shapes in different specimens. The significance of these differences is not at all clear.

Abdomen. Long, slender; of nearly uniform width; with a pair of very small dorsal tubercles slightly behind the middle. The six spinnerets and cribellum appear typical in males of the genus. The abdomen is well supplied with plumose hairs.

Color in alcohol. Carapace: the basic color is a yellowish brown; with a narrow darker median stripe and a fairly broad and still darker dorsolateral stripe on each side; white plumose hair extends between the PLE up to the enlarged PME. The sternum is yellowish, with a very irregular, broken, narrow, brown border and several irregular whitish subchitinous patches. The legs are yellowish with sparsely located small black dots; the coxae are much spotted with black ventrally. Abdomen: light brownish dorsally and laterally; with a darker, median, dorsal stripe; the lateral sides possess several alternating, light and dark longitudinal stripes; the venter has a fairly broad, brownish, variegated, median stripe and many small, whitish, subchitinous, irregular spots on each side of the darker median stripe.

Female. Total length about 24.7 mm. Carapace about 8.58 mm. long; 4.225 mm. wide opposite interval between second and third coxae where it is widest; much narrowed immediately in front of first coxae where it is about 2.405 mm. wide; surface with numerous shallow depressions.

Eyes. General features as in male. Ratio of eyes AME : ALE : PME : PLE = 9.5 : 11 : 44 : 12.5.

Chelicerae. Essentially as in male except for teeth along the fang groove. The specimen from which this description is chiefly taken shows seven teeth along the promargin of which the second, fifth, and seventh are very small. Along the retromargin there are five or six teeth of moderate size and many minute teeth, little more than minute tubercles; immediately behind the last tooth of moderate size there is a series of five very minute teeth some of which are on the lower part of the larger tooth itself; some of the minute teeth occur in the fang groove. The fang groove in another female specimen showed the promargin with six teeth of which the fourth and sixth were small, the others of moderate size; the retromargin had eight teeth in an irregular row together with numerous minute tubercles. There is a well defined scopula along the promargin of the fang groove.

Maxillae. Essentially as in male.

Lip. This structure is abnormal in the specimen chiefly used for this description. Another specimen has the lip essentially as shown in Figure 1.

Sternum. Also essentially as in male.

Legs. 1243. Width of first patella at "knee" .88 mm., tibial index of first leg 4. Width of fourth patella at "knee" .902 mm., tibial index of fourth leg 6.

	Femora	Patellae	Tibiae	Metatarsi	Tarsi	Totals
			(All measurements in mm.)			
1.	18.525	2.925	17.680	18.850	4.160	62.140
2.	18.200	2.860	16.900	16.900	2.929	57.789
3.	13.780	2.015	10.400	10.725	1.950	38.870
4.	14.170	2.665	12.545	11.895	1.950	43.225

I have found difficulties in making leg measurements as accurate as usual because of fragility and breakage. The palpal claw has three prominent teeth; the palpal tarsus bears many stiff bristles and numerous spines. The calamistrum is fairly well developed on the proximal third of the fourth metatarsus. All legs are richly provided with spines of two kinds; the usual type are numerous, short and, apparently, not regularly placed; the second type is a slender, highly branched, unusual kind. Trichobothria have not been observed in females, perhaps because of the multiplicity of spines.

Abdomen. Badly distorted by the preservative. Apparently as in male in all essential general features except that the dorsal tubercles somewhat in front of the middle are moderately well developed in contrast to the minute tubercles in the male; each tubercle has its posterior surface covered by a coating of short, white hairs. The cribellum is well developed and undivided.

Epigynum. Essentially as represented in Figure 4.

Color in alcohol. Essentially as in male except that the whole coloration is darkened to a dull brown in general; the dorsal surface of the abdomen bears a series of isolated, small, white dots caused by clusters of short, white hairs.

Collection records. Both specimens chiefly used for this description were collected on Barro Colorado Island, C. Z., July, 1954. Several other adults and numerous immature specimens are in the collection from many localities in the Canal Zone and Boquete, Chiriqui, Panama. The species seems to be fairly abundant on Barro Colorado Island. All specimens referred to in this paragraph are now deposited in the Museum of Comparative Zoology at Harvard College.

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